

List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 11 (Cancelled).

12. (New) An apparatus for determining and/or monitoring the volume-and/or mass-flow of a medium flowing through a pipeline and defining a stream direction, the pipeline defining an outer wall, comprising:

at least two ultrasonic sensors, which are secured in a defined measuring positional relationship on the outer wall of the pipeline and which alternately emit and receive ultrasonic measuring signals; and

a control/evaluation unit connected to said at least two ultrasonic sensors, which determines volume- and/or mass-flow of the medium in the pipeline on the basis of a travel time difference of the ultrasonic measuring signals in the stream direction and opposite to the stream direction, wherein:

said at least two ultrasonic sensors are secured on a pliers-like clamping unit, which is embodied in such a manner that said at least two ultrasonic sensors are brought into a measuring positional relationship by clamping onto the outer wall of the pipeline.

13. (New) An apparatus as claimed in claim 12, wherein:

said pliers-like clamping unit is so embodied that said at least two ultrasonic sensors are automatically brought, when clamped onto the pipeline, into the measuring positional relationship, largely independently of the outer diameter of the pipeline.

14. (New) The apparatus as claimed in claim 12, wherein:

said pliers-like clamping unit is embodied in such a manner that said at least two ultrasonic sensors are arranged in the measuring positional relationship in a two,

or more, traverse arrangement on a surface of the outer wall, essentially parallel to the longitudinal axis of the pipeline.

15. (New) The apparatus as claimed in claim 12, wherein:

said pliers-like clamping unit is embodied in such a manner that said at least two ultrasonic sensors are arranged in the measuring positional relationship on opposing sides of the pipeline in a one-traverse arrangement or in a multiple one-traverse arrangement.

16. (New) The apparatus as claimed in claim 12, wherein:

said pliers-like clamping unit comprises a first portion and a second portion.

17. (New) The apparatus as claimed in claim 16, wherein:

said first portion comprises two lever arms, which are coupled with one another in mid-regions thereof via a pivot connection.

18. (New) The apparatus as claimed in claim 16, wherein:

said second portion includes the following components: two guide rails arranged in V-shape and coupled together in connected end regions via a pivot connection; two securely-clampable pivot connections provided in free end regions of said guide rails and in end regions of a transverse member; two connecting pieces, on which said at least two ultrasonic sensors are secured; said transverse member, which is rigidly connected with said first lever arm of said first portion; and a holder, which is connected with said second lever arm of said first portion.

19. (New) The apparatus as claimed in claim 12, further comprises:

a first rotation transmitter, which determines the angle between said two lever arms, wherein:

said control/evaluation unit determines, on the basis of the determined angle between said two lever arms the outer diameter of the pipeline.

20. (New) The apparatus as claimed in claim 12, further comprising:
at least one additional ultrasonic sensor, which determines the wall thickness
of the pipeline.

21. (New) The apparatus as claimed in claim 20, further comprising:
a compensating unit which automatically compensates for the thickness of the
wall of the pipeline by corresponding height displacement of said pliers-like clamping
unit.

22. (New) The apparatus as claimed in claim 21, further comprising:
a second rotation transmitter and a length sensor, via which the influence of
the wall of the pipeline on the travel time of the ultrasonic measuring signals is
automatically taken into consideration.